July 3, 2008

E-19J

Jon K. Ahlness
Regulatory Branch, St. Paul District
U.S. Army Corps of Engineers
190 Fifth Street East, Suite 401
St. Paul, Minnesota 55101-1638

RE: Wisconsin Power and Light Power Plant - Draft Environmental Impact Statement (CEQ # 20080202)

Dear Mr. Ahlness:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Wisconsin Power and Light (WP&L) Power Plant proposal. We offer our comments under the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act.

WP&L proposes to build a 300-megawatt (MW) coal-fired generating facility at the existing Nelson E. Dewey (NED) Generating Station in Cassville, Wisconsin. An alternative site for this generating facility, at the existing Columbia Energy Center (COL) near Portage, Wisconsin, is also evaluated in the DEIS. The NED site proposal would use a circulating fluidized bed boiler (capable of using a variety of coal fuel and, potentially, up to 10 percent biomass), add a rail lines for fuel delivery, upgrade barge docks in the Mississippi River, and include a new a lateral collector groundwater well for process water. The COL site alternative would use a pulverized coal boiler (capable of using Powder River Basin coal and, potentially, up to four percent biomass). Both sites would require a new cooling tower system and new transmission lines.

Based on the information provided in the DEIS, EPA has assigned a rating of "EC-2" to both build alternatives and to the overall document. The "EC" indicates that we have environmental concerns with the proposed project. The "2" indicates that additional information needs to be provided to support the impact analysis documented in the DEIS (see the enclosed summary of ratings definitions). This rating will be published in the Federal Register.

We have comments about information and impacts regarding surface water quality, ground water hydrology, air emissions, and threatened and endangered species. We are also concerned by the absence of a cumulative impacts analysis for the project,

particularly as it relates to the aforementioned topics. The Final EIS and any further documentation of impacts for this project should include a cumulative impacts analysis to air quality, water quality, threatened and endangered species, among other topics. Our full comments are enclosed.

In the Notice of Intent (dated January 2008), the NED site was the preferred alternative; subsequently, the Army Corps of Engineers (Corps) has noted in conference calls that although the NED site is the applicant's preferred alternative, the Corps has not made a selection or recommendation in the DEIS. Perhaps as a result, the DEIS implies that NED is the preferred alternative and offers more information about the NED site, even though it is not specifically named as a preferred alternative. We recommend that future environmental documentation clearly identify the preferred alternative and explain the factors that influence its selection. We also note that NED alternative has greater environmental impacts than the COL site, with respect to wastewater discharge, threatened and endangered species, air emissions, rail expansion, and other factors. On the basis of the environmental impacts described thus far in the DEIS, we find that the COL alternative is the environmentally preferred alternative.

Thank you for the opportunity to review and provide comments on the DEIS. If you have any questions or would like to discuss our concerns and recommendations, please contact Anna Miller of my staff at either miller.anna@epa.gov or (312) 886-7060.

Sincerely yours,

/s/s A. Miller for KA Westlake

Kenneth A. Westlake, Supervisor
NEPA Implementation
Office of Enforcement and Compliance Assurance

Enclosures

U.S. EPA Comments on Wisconsin Power and Light Power Plant Draft Environmental Impact Statement

Water Quality

The Draft Environmental Impact Statement (DEIS) does not describe the application of the Clean Water Act Section 401 water quality certification to this project. This information should be included in the Final EIS (FEIS).

The NED site alternative includes a new barge unloading facility in the Mississippi River, which will require dredging. The DEIS, however, does not include information on these activities, such as information of possible effects of dredging or possible impacts to species or water quality during construction. We recommend that future environmental documentation describe the full effects of the dredging that would take place to install the barge unloading facilities at the NED site.

The applicant proposes using dredged material as on-site fill in the Mississippi floodplain. The DEIS does not describe the composition of the dredged materials or evaluate whether they can be used as fill or must be otherwise disposed or stored. The DEIS states that information from a 2006 dredging activity will be used to assess dredged material composition and landfill options, although this information is not included. We recommend that future environmental documentation identify the location of the area to be filled and evaluate any potential impacts from the fill.

The new coal pile runoff ponds at the NED site would be discharged through an existing outfall (002). We recommend the FEIS discuss whether the discharge volume or composition will change and if that will necessitate a wastewater permit modification (the new proposed coal pile would be approximately three times bigger in footprint and volume than the existing coal pile).

The NED site proposal includes new bridges over the Dewey and UN Creeks. The DEIS notes that the proposed bridge designs do not meet current Wisconsin law for placement of bridges over navigable waterways. Furthermore, the DEIS does not assess potential environmental impacts from these proposed bridges. We recommend the FEIS include an evaluation of bridge impacts, and we suggest the applicant resolve bridge design issues with the appropriate Wisconsin State agency.

Air Emissions

The Tables 8.3.8 (page 169) and 9.3.8 (page 179), which compare the greenhouse gas (GHG) emission profiles for the different boiler systems and fuel mixes, do not include the units of the emissions from each GHG. Although we presumed the emissions units are intended to be tons per year, the FEIS should include the units. These tables also describe N_2O emissions in terms of CO_2 equivalents only. We recommend that the FEIS

quantify N_2O emissions, not just describe them as CO_2 equivalents, for both the NED and COL alternatives

Section 7.2.4.3 (page 149) discusses two relevant proposals for Wisconsin with respect to greenhouse gas regulation and reduction: Executive Order 191 and the Midwestern Governors Association Greenhouse Gas Accord. The section does not, however, elaborate on how these proposals might affect the WP&L projects and what will be done in regards to addressing the elements of these proposals. We recommend the FEIS describe how the project would factor these proposals into its operation.

Chapter 7 contains a discussion on mercury and forwards the reader to a later section, which includes general (not site-specific) information. Section 112(g) of the Clean Air Act applies in the event that mercury must be controlled and in light of the Clean Air Mercury Rule (CAMR) regulation, which has been stayed through Federal litigation. The Wisconsin Department of Natural Resources (WDNR) has regulated mercury through Prevention of Significant Deterioration (PSD) regulations with Best Available Control Technologies (BACT) and also through 112(g), case-by-case Maximum Achievable Control Technologies (MACT). The DEIS does not discuss specific regulations and what, if any, controls will be used to control mercury. We recommend the FEIS include an analysis which will describe the control of mercury in each alternative facility and how the existing regulations (PSD/BACT, 112(g)) apply.

Table 7.1-2 compares mercury emissions reductions for various control devices, fuel, and boiler type; however, there is no control efficiency figure given for the proposed NED configuration – sub-bituminous coal (Powder River Basin-type), fluidized bed boiler, and fabric filter baghouse. This configuration is listed as "no test" and therefore cannot be compared with other configurations. We recommend supplying this information in the FEIS or explaining why it is unavailable.

Ground Water Collector Well

The NED site will use a lateral collector well to obtain cooling water for the proposed new unit, and the DEIS states that the well's area of influence will be within the facility's footprint. We recommend the FEIS include specific information about the ground water collector well, its location, and its potential effects. We recommend including the results of the ground water analysis, a description of the aquifer and existing ground water regime, a discussion of the hydrological relationship between ground water and wetlands in the area, and in particular, an evaluation of whether the lateral collector well could affect the wetlands in the area by changing the hydrological regime via pumping. We recommend including ground water and drawdown maps and a cross-section that would illustrate the collector well's possible effects on the river. We also recommend identifying any nearby public or private drinking water wells and discuss potential impacts to these wells from the collector well.

Transmission Line impacts

Transmission line impacts are not quantified in the DEIS. More specific information needs to be provided to evaluate and compare the various transmission options at both alternative sites. In particular, potential impacts should be quantified, including acreage of cropland loss, acreage and types of wetlands that may be affected, and construction and maintenance impacts of transmission towers. We also note that the DEIS did not evaluate potential archeological impacts in Iowa, per the National Historic preservation Act (NHPA) Section 106; we recommend completing this consultation and including it in the FEIS. For the NED site, the DEIS notes that certain "rare snails" may be impacted. We recommend the FEIS identify the species in question, discuss its status relative to State or federal law, and describe the specific direct or indirect impacts.

Threatened and Endangered Species (Federal and State), Migratory Birds

EPA is concerned that the DEIS has not described impacts to the Higgins' eye mussel, a federally-endangered species. The DEIS describes that the federally-endangered Higgins' eye mussel is in the vicinity of the proposed dock facilities at the NED site alternative (page 205). The DEIS also indicates that the barge loading facility would have effects on the Higgins' eye mussel and other state-listed mussel species during construction and operation (page 217); impacts may also occur due to increased barge traffic resulting from the project. Potential impacts to this resource are not described in the DEIS, which notes instead that the Incidental Take process is ongoing with the U.S. Fish and Wildlife Service (FWS). We recommend that future environmental documents describe the specific impacts to the federal- and state-listed species. We recommend that the discussion include a description of impacts to each species and a specific discussion of potential direct and indirect impacts from each phase of the project. Information and results from the recent studies referenced in the DEIS and from the applicant's consultation with FWS would be relevant to include in this section as well.

The DEIS states very generally that clearing at the NED site would impact migratory birds. We recommend that the FEIS describe the impacts and discuss the bird species that are of concern. While the DEIS lists WDNR mitigation recommendations to limit impacts to migratory birds, we recommend the FEIS record which measures the applicant would commit to at the NED site, if selected.

The DEIS remarks that rare fish species may exist in the vicinity of the NED site, but that the State consultation process for these species is not complete at this time. We recommend the FEIS discuss which species are potentially impacted, describe their status under State and/or federal law, and describe the potential impacts from plant construction and operation phases, as well as measures the applicant may take to minimize or avoid these impacts.

Cumulative Impacts Analysis

We are concerned that the DEIS does not analyze the cumulative impacts of the project and its alternative, though such an assessment is a required component of an EIS. The Council of Environmental Quality (CEQ) requires the assessment of cumulative effects in NEPA documents, as outlined in its Regulations for Implementing NEPA in 40 CFR Parts 1500-1508 (1987). Section 1502.16 of these regulations requires that the discussion of environmental consequences of a project include discussion of direct and indirect effects and their significance, as well as environmental effects of alternatives; Section 1508.8 defines effects to include cumulative effects. Section 1508.7 states: "'Cumulative impact' is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." Any further environmental documentation for this project should include an assessment of cumulative impacts to air quality, water quality, threatened and endangered species, among other areas. Both CEQ and U.S. EPA have published guidance about assessing cumulative effects.

EPA is concerned about possible cumulative impacts to the Higgins' eye mussel. The extent of impacts to this organism is not clear without a cumulative impacts analysis that describes, among other things, the presence of the species in a determined area related to the project and cumulative impacts to the species from other past, present, and reasonably foreseeable future actions. Without a cumulative impacts assessment, it is not possible to determine or review the extent of the NED site's impacts to the Higgins' eye mussel overall or to other state-listed species. To explain these impacts, we recommend the FEIS include information on the range of the mussels in general, where they are found in the River system, whether the Cassville bed constitutes the sole community for these species, and what other current or proposed future actions could impact these species. Again, information from other documents may be relevant to include here.

Alternatives

Based on the information in the DEIS, the NED site alternative has greater environmental impacts than the COL site, with respect to water quality, threatened and endangered species, plant air emissions, rail expansion, and other factors. The DEIS indicates that the NED site could have impacts to the federally endangered Higgins' eye mussel (page 205), and its transmission line construction could present obstacles to migratory birds (page 315). The COL site has less potential to impact migratory bird and there are no identified threatened or endangered species that could be impacted. The DEIS also explains that the NED site would emit more greenhouse gases (GHG), expressed on page 169 and 179 as CO_2 equivalents, mainly because of greater N_2O emissions (which are not quantified separately) from the fluidized bed boiler system. The NED site rail alternatives could also affect various wetlands, upland forest and, if the sheet pile wall option is selected, potential impacts to wetlands functions and wildlife movement. These

impacts are only briefly discussed. Given the apparent differences in potential impacts, we find the COL alternative to be the environmentally preferred alternative. We understand that many factors influence the selection of a preferred alternative, and we recommend that the FEIS and future environmental documentation identify the preferred alternative and explain the factors influencing its selection.